Low-Wage Counties Face Locational Disadvantages

Rural counties with the largest share of jobs in low-wage industries are typically less populated and more remote from urban centers. These locational attributes coincide with fewer job opportunities in industries, such as manufacturing, that typically pay high wages. Yet most of the difference between low-wage and other rural counties is rooted in lower wage scales across all industries. Although adults in low-wage counties have less education and labor force participation overall, the role played by these forces varies by region.

Low-wage employment exists in every corner of rural America and is a significant share of all rural jobs. Yet, the distribution of low-wage employment reflects strong geographic patterns. In some rural counties, low-wage work accounts for half or more of the available jobs, essentially creating a low-wage local economy. This article describes the demographic and economic attributes of 465 rural counties with the highest proportion of workers employed in low-paying industries (see box, “What Is a Low-Wage County?”).

The low-wage counties identified here do not follow the more familiar geographic patterns of local economic distress, such as persistent poverty. Although earnings in low-wage counties were 8 percent lower than in other rural counties in 1997 (the most recent year for which data are available), poverty, unemployment, and population growth rates were not substantially different from those of other rural counties. However, low-wage counties offer a different mix of jobs. Industries that pay well as a rule are less common in these counties. In addition, jobs pay less, on average, than similar jobs elsewhere, reflecting both lower productivity and a relative lack of competition among employers.

Low-wage counties typically have a small number of workers and are located outside the commuting range of metro labor markets. Young, educated workers in these areas, facing a set of local jobs that offer limited room for advancement, often choose to move to larger, more diverse, and more lucrative job markets. With a long history of outmigration and, consequently, a larger share of older workers with limited formal education, low-wage counties find it difficult to attract more technology-dependent, “new economy” industries that offer skills development and wage progression.

Low-Wage Counties Tend To Be Small, Less Urban, Remote

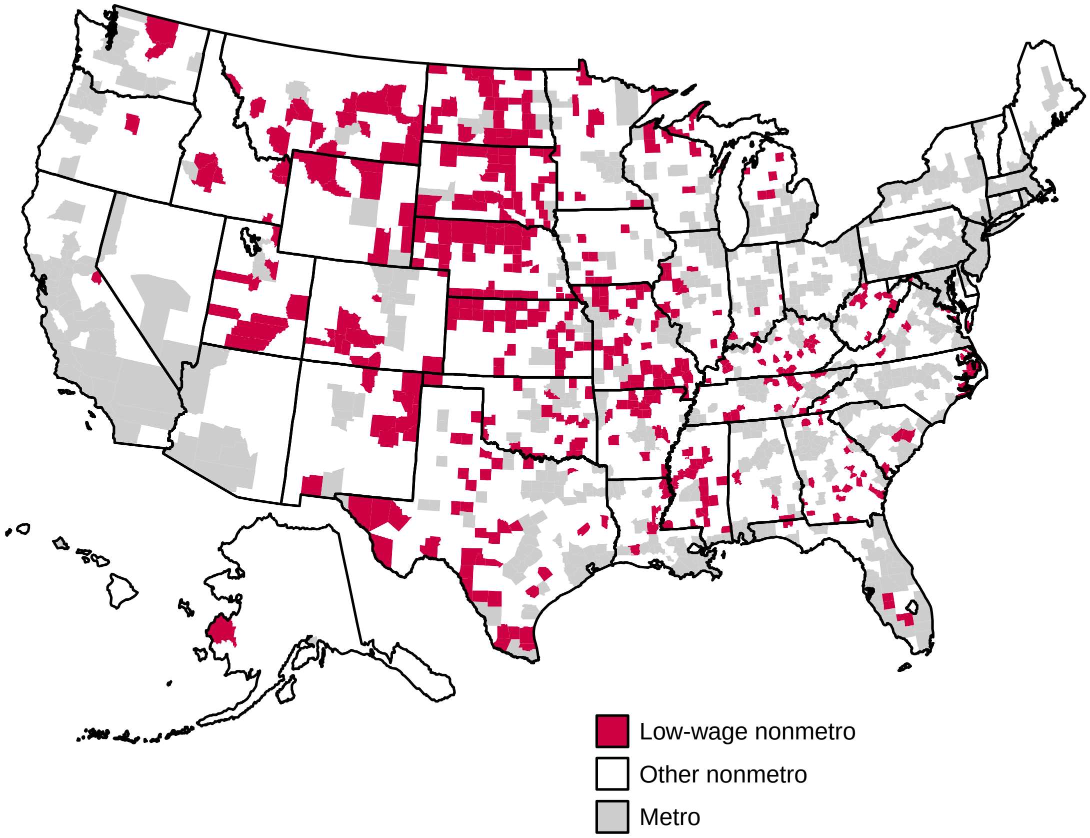
Low-wage counties are present in three of the four Census regions (the Northeast has no low-wage counties), primarily in a few clusters (fig. 1). The northern Great Plains, a region of low population density and few cities, has the largest cluster of low-wage counties. Nearly half are located in just three States: North and South Dakota and Nebraska. Smaller concentrations are evident in the Ozarks of southern Missouri and northern Arkansas; along the Rio Grande River in southern Texas; in parts of Appalachia and the coastal plains of the Southeast (including the southernmost portion of the Mississippi Delta); near the northern Great Lakes; and in scattered areas across the intermountain

What Is a Low-Wage County?

A county is identified as low-wage if it falls into the top 20 percent (quintile) of rural counties ranked by the share of wage and salary workers in low-wage industries. At least 41 percent of all workers in these 465 counties are employed in industries paying average wages that would not lift a full-time, full-year worker above the weighted-average poverty threshold for a family of four ($15,569 in 1995). This study is unique in that average wages are calculated for each three-digit SIC industry in each county, rather than assuming a single average for each industry.

The data source for this analysis is the 1995 Covered Wages and Employment Data collected by the Bureau of Labor Statistics of the U.S. Department of Labor. Because only total payroll and total employment by industry are available, a simple measure of earnings-per-worker would understate the actual wage rate for part-time workers. We used industry-specific shares of part-time workers from the Current Population Survey to adjust average wages. The exact composition of the top quintile would change slightly if we used a different year or a different poverty threshold. However, most of the identified counties would be categorized as “low-wage” and the geographic distribution of low-wage counties would remain stable under a fairly wide range of alternative assumptions.

Figure 1
Nonmetro low-wage counties, 1995
Most nonmetro low-wage counties are located in the Great Plains and the South



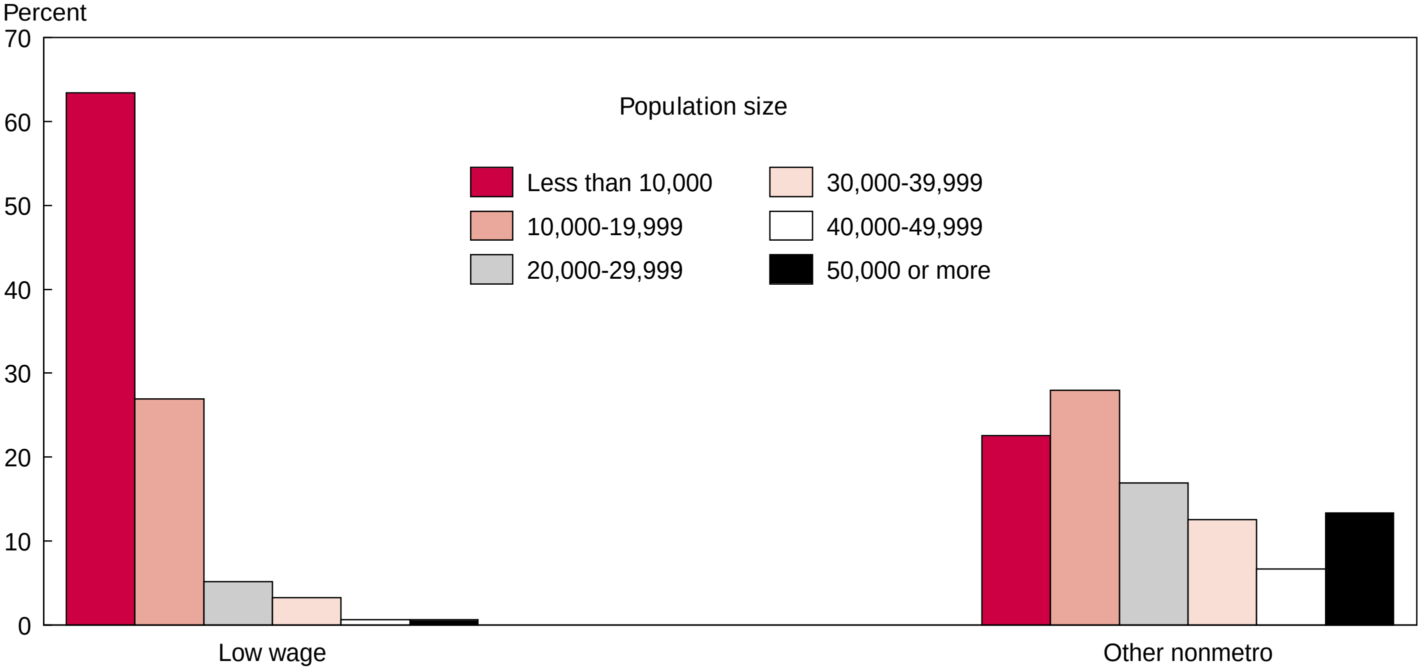
Source: Calculated by ERS using data from the Bureau of Labor Statistics.

West. Low-wage counties are absent altogether in rural New England and through the northern manufacturing belt from New York through Ohio. In the Piedmont South, also a manufacturing region, no rural counties that surround the wide band of metro areas stretching from eastern North Carolina to northern Alabama were typed as low-wage. Only three low-wage counties are found in the States along the Pacific Coast, where most rural economies have been growing and diversifying in recent years. Hawaii and rapidly growing Arizona and Nevada have no low-wage counties.

The areas in which rural low-wage counties are clustered tend to have smaller than average populations, are less urban, and are remote from metro areas. Over 90 percent of low-wage counties have fewer than 20,000 people, compared with fewer than half of other counties (fig. 2). Only six low-wage counties out of 465 have more than 40,000 people. Their smaller populations also tend to be more dispersed, with fewer large-town dwellers and more people living in villages or open countryside. Two-thirds have no urban population, meaning no towns with at least 2,500 people, compared with one-quarter of non-low-wage counties. Low-wage counties are likely to be some distance away from metro areas as well–over 70 percent are not adjacent to a metro area, compared with 53 percent of other rural counties (table 1).

Smaller populations that are remote from urban areas have both advantages and disadvantages for low-wage counties. During the early 1990's, these attributes often attracted new residents looking for an alternative to troubled, congested urban areas. A substantial number of small, remote counties enjoyed renewed employment and population growth,

Figure 2
Share of low-wage and other nonmetro counties by population size, 1999
Over 90 percent of low-wage counties have fewer than 20,000 people, compared with 50 percent of other counties



Source: Calculated by ERS using data from the U.S. Census Bureau.

Table 1
Distribution of rural low-wage counties by rurality
Most low-wage counties are remote from cities and have no urban population

Rural-urban continuum	Low-wage counties		Other rural counties	
	Number	Percent	Number	Percent
Adjacent, highly urban	1	0.2	137	7.4
Nonadjacent, highly urban	3	.7	111	6.0
Adjacent, less urban	63	13.6	551	29.9
Nonadjacent, less urban	87	18.7	570	31.0
Adjacent, nonurban	64	13.8	184	10.0
Nonadjacent, nonurban	247	53.1	288	15.6
Total rural	465	100	1,841	100
Total nonadjacent	337	72.4	969	52.7
Total nonurban	311	66.9	472	25.6

Source: Calculated by ERS using 1995 Bureau of Labor Statistics Covered Wage and Employment Data.

or had smaller declines, a welcome change to the economic and demographic declines of the preceding decade. Yet in the long run, the same qualities that appeal to many migrants also deter employers who need ready access to suppliers and customers and larger pools of workers with more diverse skills than small, remote low-wage counties can usually provide. More recent data show that the population resurgence of the early 1990's has subsided (see box, “The Nonmetro Population Growth Rate Recedes in a Time of Unprecedented National Prosperity,” p. 27).

Low-Wage Counties Often Depend on Farm Income

Nearly half of all low-wage counties are also classified as farming-dependent in the Economic Research Service’s county typology, which means that a relatively large share of county income derives from farm operations (fig. 3). Most of these counties are located in the northern Great Plains, a region largely bypassed by the economic growth occurring in the rest of rural America.

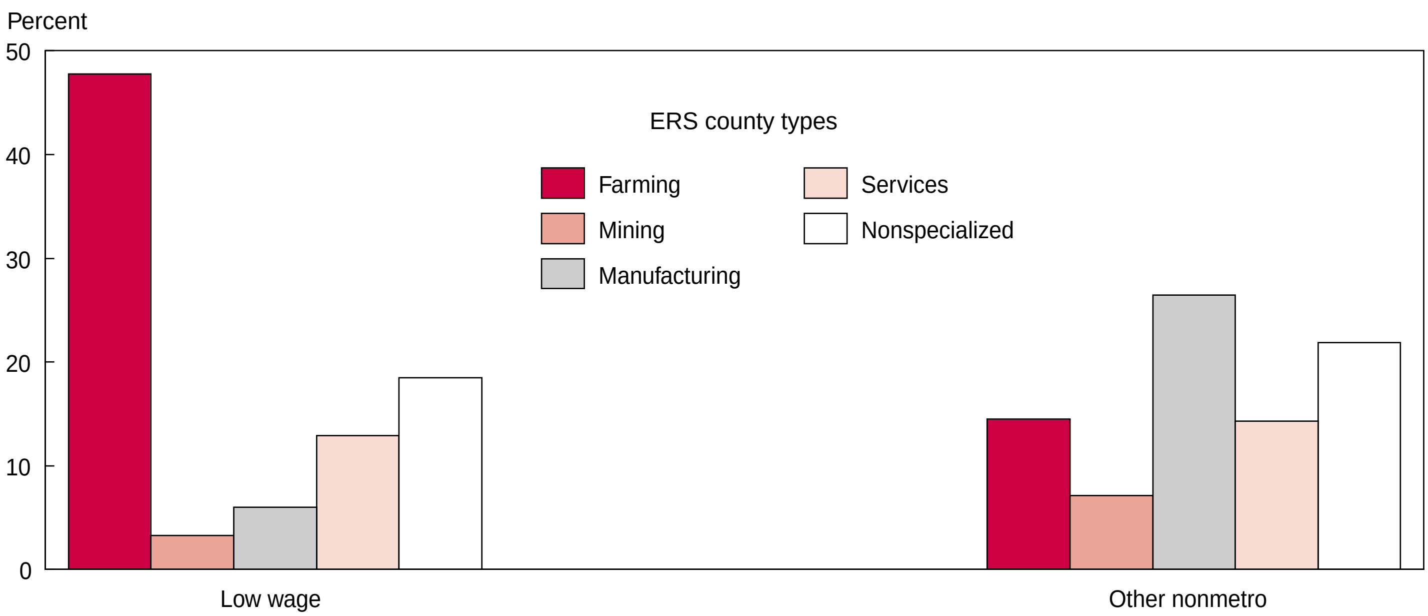
Farm employment, however, is unlikely to be the key source of low wages in many of these counties. The large number of self-employed farm jobs in Midwestern low-wage counties was not counted in the data used to identify low-wage employment. The remaining farm jobs, held mostly by hired farmworkers, typically made up less than 10 percent of all jobs in the county. Rather, farming-dependent counties are often low-wage because they are small and remote–attributes that have discouraged the location and expansion of high-wage industries. Slow-growing or declining employment, coupled with a lack of industrial diversity, left wage and salary workers in these counties with limited opportunities to move out of entry-level jobs requiring relatively little education or training.

Conversely, few low-wage counties depend on mining or manufacturing, which usually pay above-average wages in rural counties. Rural manufacturing has historically relied on a low-cost labor force, and its advantages to employers have been strengthened by improved national transportation and communication networks over the past half century. For the average rural worker, manufacturing offers better paying, steadier employment with fringe benefits such as health insurance and paid leave, compared with many service and trade jobs. Like farming-dependent low-wage counties, those reliant on manufacturing and mining exhibit strong regional concentration. Nearly all manufacturing-dependent low-wage counties are located in the rural South, where manufacturing continues to employ a

Figure 3

Share of low-wage and other nonmetro counties in ERS county typologies

Low-wage counties are more likely to be farming-dependent, less likely to be manufacturing-dependent than other nonmetro counties



Source: Calculated by ERS using data from the Bureau of Economic Analysis.

significant share of the workforce. Similarly, all mining-dependent low-wage counties are in the West.

Low Wages Within Industries Define Low-Wage Counties More Than Industry Composition

Broad differences by economic type suggest that low-wage counties have relatively fewer jobs in industries that typically pay good wages, such as higher education or motor vehicle manufacturing, and more jobs in industries that have mostly low-wage work. Employment shares within detailed industry classifications differ between low-wage and other rural counties (table 2). Six of the 10 industries with the largest employment in low-wage counties qualify as low-wage industries because the average wage was below the poverty threshold for a family of four ($15,569 in 1995, the year for which low-wage counties are identified). In other rural counties, 2 of these 6 were not in the top 10 industries. Similarly, the 10 largest low-wage industries all exhibit greater employment shares in low-wage counties than in other rural counties. Thus, broad differences in economic type noted above accrue from smaller, cumulative differences within detailed industries.

A county also may have lower wages within each industry, so that even with the same jobs, wages would be lower. Without exception among the top 25 industries, average wages are lower in low-wage counties. Medical doctors and other health care workers in clinics in low-wage counties earn 28 percent less than rural workers in medical clinics elsewhere ($30,364 and $42,290). The pay gap is similar for public safety employees and government workers. The gap is smaller for other key industries, with a gap of only 3 percent for banking and 1 percent for home health care.

The industry mix and wage results combined suggest that low-wage counties are unique both because the jobs available are somewhat different and because general wage scales are lower. The larger effect comes from lower wages. A rough measure of the relative contributions of each to the overall low-wage condition can be calculated using different scenarios. If the industry mix remained the same but low-wage counties had the same industry-specific wages as other rural counties, then overall earnings per job would increase 18 percent, from $16,538 to $19,575, which explains most of the gap between low-wage and other rural counties, where overall earnings per job is $20,691. If wages remained constant and industry mix shifted to that of other rural counties, the overall earnings per job in low-wage counties would rise by 4.9 percent, to $17,189. Thus, industry mix is less a problem for these counties than the lower wages paid by any given industry. Lack of competition in smaller, more isolated labor markets may serve to drive down wages across the board.

Education Levels in Low-Wage Counties Are Lower in South, Not in West

Industry differences are reflected in the labor force characteristics of low-wage counties. Labor force participation rates are lower than average, partly a result of lower wage incentives to employment, but probably also due to slightly older populations and fewer job opportunities for dual-earner households. Similarly, unemployment rates in these counties are slightly above average, although regional differences play an important role here, with rates much lower in the agricultural Great Plains counties than in the South (see “Nonmetro Employment and Unemployment Trends Remain Favorable,” p. 39).

Rural areas overall have a larger share of jobs requiring low or medium levels of education and training, compared with urban areas. Corporate headquarters and research and development facilities are less likely to locate in rural areas, and thus skill requirements differ. Lower wage scales and dependence on agriculture in many low-wage counties reinforce the rural-urban education gap. Low-wage counties overall have only slightly lower education levels than other rural counties, with a higher proportion of adults without a high school diploma (30.7 versus 35.4 percent) and a lower proportion of college graduates (10.8 versus 12.9 percent) (table 3).

Table 2

Top 25 industries in rural counties, 1995

Rural low-wage counties have lower wages across all industries compared with other rural counties; they also have a higher share of workers in the top low-wage industries, such as eating and drinking establishments, grocery stores, hotels and motels, and gas stations

		Low wage-counties			Other rural counties		
Rank	Standard Industrial Classification	Jobs	Share of jobs	Anual earnings per job	Rank	Share of jobs	Annual earnings per job
		Number	Percent	Dollars		Percent	Dollars
1	Elementary and secondary schools (821)	128,976	10.6	20,230	1	7.5	22,487
2	**Eating/drinking places** (581)	88,514	7.3	6,997	2	6.6	7,788
3	**Grocery stores (**541)	50,255	4.1	10,671	4	3.4	12,047
4	**Nursing/personal care** (805)	47,286	3.9	12,015	5	2.4	13,981
5	**Government offices** (913)	42,777	3.5	14,062	7	2.0	18,572
6	Hospitals (806)	41,006	3.4	19,917	3	3.9	24,161
7	**Hotels and motels** (701)	26,569	2.2	9,878	9	1.6	12,584
8	**Mens/boys clothing** (232)	24,872	2.1	12,714	25	.7	14,705
9	Banks (602)	23,868	2.0	22,291	12	1.3	23,091
10	**Amusement/recreation** (799)	18,335	1.5	12,611	14	1.1	13,498
11	**Gas stations** (554)	17,635	1.5	10,674	17	1.0	11,907
12	Trucking and courier (421)	17,464	1.4	21,067	10	1.6	24,714
13	Meatpacking (201)	17,141	1.4	15,817	11	1.4	19,986
14	**Department stores** (531)	15,545	1.3	11,352	6	2.0	12,216
15	Public safety (922)	11,930	1.0	20,289	13	1.3	27,359
16	Solid waste management (951)	11,345	.9	24,682	44	.5	28,274
17	Sawmills (242)	11,325	.9	18,725	22	.7	24,311
18	U.S. Postal Service (431)	11,257	.9	26,783	28	.6	30,625
19	Medical offices/clinics (801)	10,995	.9	30,364	15	1.1	42,290
20	**Farm wholesaling** (515)	10,978	.9	15,044	64	.3	18,758
21	Car dealers (551)	10,863	.9	23,171	18	.9	27,269
22	**Family services (**832)	10,807	.9	13,499	24	.7	15,386
23	Home health care (808)	10,049	.8	16,458	40	.5	16,678
24	Nondurable wholesaling (519)	9,988	.8	19,581	31	.6	21,533
25	Highway construction (161)	9,385	.8	20,963	29	.6	27,147

Note: Industries with average earnings per job in low-wage counties below the four-person poverty threshold are in bold.
Source: Prepared by ERS using data from the Bureau of Labor Statistics.

Table 3

Educational attainment in low-wage and other rural counties, 1990

Low-wage counties have larger shares of adults without a high school diploma than other rural counties, with the largest differences in the rural South

Location	Less than high school	High school	Some college	College degree	Total
			Percent		
All rural:					
Low-wage	35.4	34.4	19.2	10.8	100
Other	30.7	34.9	21.3	12.9	100
Midwest:					
Low-wage	29.2	38.3	21.0	11.3	100
Other	26.0	39.6	22.0	12.2	100
South:					
Low-wage	43.2	31.5	15.9	9.1	100
Other	38.3	31.7	18.5	11.3	100
West:					
Low-wage	22.9	32.2	28.0	16.7	100
Other	22.9	31.1	29.5	16.3	100

Source: Calculated by ERS using data from the 1990 Census of Population.

Both absolute and relative education levels in low-wage counties depend largely on location. Southern rural counties have the highest rate of adults without high school degrees. The very high rates in southern low-wage counties—43 percent in 1990—are only 5 percentage points above the rest of the rural South. In the West, low-wage and other rural counties exhibit no differences in education levels; the high school dropout rate for both types of counties in the rural West (29 percent) is lower than that for non-low-wage counties in the rural South (38 percent).

Most Low-Wage Counties Are Not Persistently Poor, Except in the South

The distinctive geographic patterns of low-wage counties suggest that regional concentrations of poverty and low earnings are related, but not synonymous. While low-wage areas overlap substantially with areas of persistent rural poverty, key differences are also evident. Only a third of all low-wage counties are also persistent poverty counties, as defined by the Economic Research Service, and slightly less than a third of persistent poverty counties are low-wage (fig. 4).

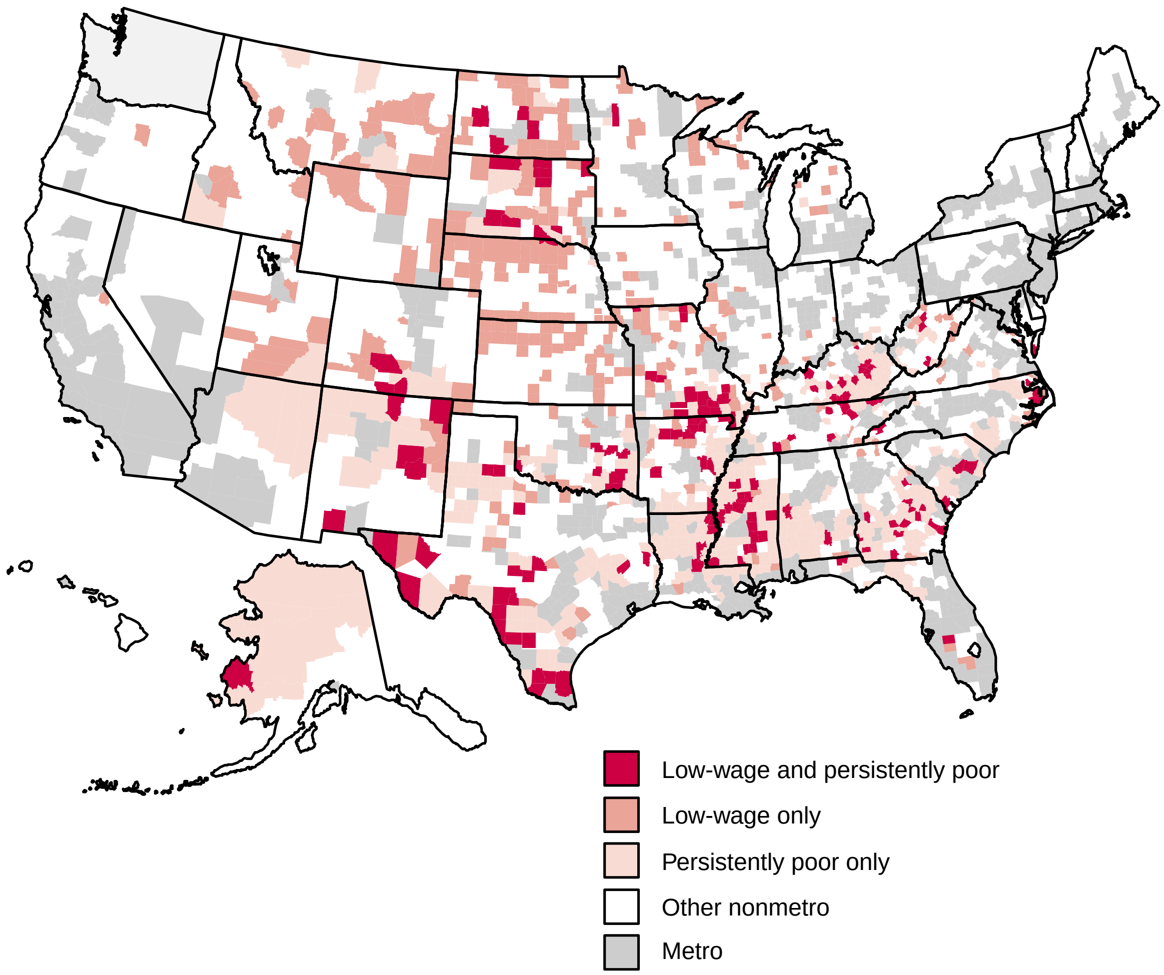
The relationship between low wages and persistent poverty varies sharply by region. In both the Midwest, which includes the Great Plains, and the West, only 14 percent of the low-wage counties are persistently poor, compared with well over half (61 percent) of low-wage counties in the South. These regional differences are not surprising, given the South's high incidence of persistent poverty overall. Nonetheless, most southern persistent poverty counties (three out of four) are not among the low-wage group, which suggests that the economic and social conditions associated with poverty and low pay differ.

Workers in the low-wage counties of the Midwest/Great Plains and the West may largely avoid poverty through strategies such as two-earner families or multiple jobs (combining farm and off-farm work, for example). Other residents with few alternatives to low-paying jobs often migrate elsewhere. By contrast, southern workers in low-wage counties may be less likely to employ such strategies, boosting county poverty rates relative to those in other regions. In addition, high poverty rates in the South are often closely associated

Figure 4

Low-wage and persistently poor nonmetro counties

Despite some overlap, low-wage and persistently poor nonmetro counties form largely distinct groups



Source: Calculated by ERS using data from the Bureau of Labor Statistics.

with family structure and nonparticipation in the labor force. These latter characteristics only partly depend on the wage structure of local labor markets.

Human Capital Needs of Low-Wage Counties Differ by Region

Economic activity in rural America has historically been rooted in an industrial and agricultural base generating large numbers of low-wage jobs. Although the 20th century witnessed a dramatic transformation of rural employment away from farming and resource extraction to manufacturing and services, a significant share of rural workers still receive low wages. The geographic concentration of low-wage work in specific regions and types of counties reflects the economic diversity of the Nation's rural counties. In rural areas in which people commute to nearby urban centers, the workforce has taken on many characteristics of relatively high-wage urban economies. In remote counties with smaller populations, low-wage work often comprises a majority of available jobs.

Small populations and remoteness remain the most salient features of low-wage counties at the end of the century. Yet the character of low-wage counties also depends critically on broader regional forces. The South, West, and Midwest (including the northern Great Plains) present contrasting pictures of low-wage areas.

The Midwest/Great Plains presents the dominant picture of the low-wage county–a county that depends largely on capital-intensive farming. Workers in low-wage counties in the Midwest are generally well-educated, though with slightly lower high school completion rates than workers in non-low-wage counties. Small populations and remoteness are especially acute and constrain the number and kind of employers willing to locate or expand in these counties.

Low-wage counties in the South share low rates of high school completion and relatively low labor force participation with other counties in the region. Human capital development is a more pressing issue here than elsewhere. Although the economies of southern low-wage counties are more diversified than in other regions, they tend to appeal to employers seeking unskilled, low-cost, but relatively plentiful labor.

Conditions in low-wage counties in the West suggest a different set of forces at work. A minority of western low-wage counties, particularly those with large Hispanic or Native American populations, resemble the South with their low human capital levels. Instead, school completion rates in most western low-wage counties are as high as in the rest of the region; moreover, workers in these counties have even higher labor force participation rates and lower unemployment than their non-low-wage counterparts. Lower returns to education, rather than the lack of education, may play a key role in the West. In addition, many low-wage counties in the region are high-amenity counties, often characterized by a large number of seasonal, low-paying jobs in recreation-related industries, and by a relatively large number of residents willing to work for less in order to take advantage of the region's natural attractions.

The economic and social environments that give rise to low-wage areas will require closer scrutiny in the coming years, as Federal and State assistance policies shift from maintaining households to encouraging employment. The experiences of these counties may provide clues to help people find self-sustaining work where good-paying jobs, especially for less-educated workers, are difficult to find. At the same time, the nature of low-wage counties will inevitably change as the adult population in persistently poor (but not low-wage) counties moves toward greater labor force participation. *[Robert Gibbs, 202-694-5423, rgibbs@ers.usda.gov, and John B. Cromartie, 202-694-5421, jbc@ers.usda.gov]*